WHAT IS CLAIMED IS:

1. Isolated human DCR5 protein.

2. The isolated human DCR5 protein of claim 1, having the amino acid sequence as set forth in SEQ ID NO: 12.

3. Protein domains having DCR5-specific activity, such domains comprising at least 6 and preferably at least 8 consecutive residues of human DCR5 protein of claim 1.

4. An antibody which specifically binds the isolated human DCR5 protein of claim 1.

5. The antibody of claim 4, which is a monoclonal antibody.

6. A composition comprising the human DCR5 protein of claim 1, in a pharmaceutically acceptable carrier.

7. A composition comprising the antibody of claim 4, in a pharmaceutically acceptable carrier.

8. A human DCR5 protein produced by the method of:

a) constructing a vector comprising a nucleic acid molecule containing a nucleotide sequence encoding human DCR5 protein as set forth in SEQ ID NO: 12, wherein the nucleic acid molecule is operatively linked to an expression control sequence capable of directing its expression in a host cell;

b) introducing the vector of (a) into a host cell;

c) growing the host cell of (b) under conditions which permit the production of human DCR5 protein; and

d) recovering the human DCR5 protein so produced.

9. The protein of claim 7, wherein the host cell is a bacterial, yeast, insect or mammalian cell.

10. The human DCR5 protein of claim 1, fused to an immunoglobulin constant region.

11. The human DCR5 protein of claim 10, wherein the immunoglobulin constant region is the Fc portion of human IgG1.

12. A method of regulating cartilage and bone growth in a subject in need thereof comprising administering to the subject a therapeutically effective amount of the human DCR5 protein of claim 1 such that cartilage and bone growth are regulated.

13. A method of regulating cartilage and bone growth in a subject in need thereof comprising administering to the subject a therapeutically effective amount of the antibody of claim 4 such that cartilage and bone growth are regulated.